

Appl. No. 10/066,250
Amdt. dated January 29, 2004
Reply to Office action of January 8, 2004

Amendments to the Claims

1. (amended) A solvent extraction free, caustic refining free, process for producing soybean oil from soybeans comprising:

- a) heating said soybeans to at least 300°F;
 - b) mechanically pressing said soybeans to separate soybean oil from soybean meal;
- and
- c) heating said soybean oil to a temperature of from about 450°F to about 500° F under a vacuum to remove free fatty acids from said soybean oil.

2. (original) The process of claim 1, wherein said soybeans are heated to at least 300°F in less than about 60 seconds.

3. (original) The process of claim 1, wherein said soybeans are crushed while being frictionally heated to a temperature of from about 300°F to about 370°F.

4. (original) The process of claim 1, further including degumming said soybean oil following pressing.

5. (original) The process of claim 1, further including bleaching said soybean oil following pressing.

6. (original) The process of claim 1, including the step of crushing said soybeans while said soybeans are being heated.

7. (original) The process of claim 1, wherein said soybean oil is heated under a vacuum at a temperature of from about 460°F to about 480°F.

8. (original) A solvent extraction free, caustic refining free, process for producing non-hydrogenated soybean oil having an improved frylife comprising:

- a) heating said soybeans to a temperature of at least 300°F in less than 60 seconds;
- b) crushing said soybeans to form a mixture of soybean meal and soybean oil;
- c) pressing said mixture to separate soybean oil from said soybean meal; and
- d) heating the soybean oil to a temperature of from about 450° F to about 500° F

under a vacuum to remove free fatty acids from said soybean oil.

9. (original). The process of claim 8, wherein said soybean oil is degummed and bleached after pressing.

10. (original). The process of claim 8, wherein said soybean oil is crushed while frictionally heating said soybeans.

11. (original). The process of claim 8, wherein said soybeans are heated to a temperature of from about 315°F to about 335°F.

12. (original). The process of claim 8, wherein said soybeans are crushed while being frictionally heated.

13. (original). The process of claim 12, wherein said soybeans are crushed in less than 30 seconds, while being frictionally heated to a temperature of from about 315°F to about 335°F.

14. (original). The process of claim 8, wherein said soybean oil is heated under a vacuum at a temperature of from about 460°F to about 480°F.

15. (withdrawn) Soybean oil produced by the process of claim 1.

16. (withdrawn) Soybean oil produced by the process of claim 8.

17. (new) A solvent extraction free, caustic refining free, process for producing non-hydrogenated soybean oil having a frylife of at least 30 fry cycles comprising:

a) crushing said soybeans in less than 30 seconds while frictionally heating said soybeans to a temperature of at least about 300°F to form a mixture of soybean meal and soybean oil containing free fatty acids;

b) pressing said mixture to separate soybean oil from said mixture; and

c) heating said soybean oil to a temperature of from about 450° F to about 500° F

~~under a vacuum to remove free fatty acids from said soybean oil.~~

18. (new) The process of claim 17, wherein said soybeans are frictionally heated to a temperature of from about 315°F to about 335°F.

19. (new) The process of claim 17, wherein said soybean oil is heated under a vacuum at a temperature of from about 460°F to about 480°F.

20. (new) The process of claim 17, further including degumming and bleaching said soybean oil following pressing.